

AMENDMENTS TO THE DRAWINGS

Applicants respectfully request approval of the proposed changes to Fig. 3, as appended hereto. In Fig. 3, Applicants have added a solid line connecting the carrier-detect 330 to the output of the A/D 320 and a broken line connecting the carrier-detect 330 to the input of the A/D 320. These amendments are fully supported in the specification on page 4, lines 28-33, and no new art has been added.

REMARKS

Claims 1-13 are presently pending in the application. Claims 1-3, 6-9, and 12-13 were rejected under 35 U.S.C. 102(e) as being anticipated by Roberts. Claims 4, 10, and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of LaJoie.

Applicants have amended independent claims 1 and 6 to make clearer the present invention. Accordingly, claims 2 and 7 have been canceled. The present invention is directed towards a burst-mode digital transmitter that allows a combined reverse optical signal to be transmitted to the headend. Prior to the present invention, reverse optical signals could not be combined onto the same media without manipulation of the signals. For example, as noted in Roberts (6,418,558, col. 27, 14-30), in order to transmit signals in the upstream direction, set-top box information is received and frequency shifted as shown in FIG. 118. The upstream from one coaxial leg is then combined with additional coaxial legs.

Moreover, it is respectfully submitted that the carrier detector, delay, and switch of the present invention is not equivalent or the purpose taught in the cited art. The purpose of the carrier, amplitude, and timing recovery block of the cited art is to initialize and activate the ISUs such that the waveform from distinct ISUs combine to a unified waveform at the HDT, col. 51, lines 1-3. In this manner, the adjustment signals then allow for accuracy prior to frequency shifting.

Additionally, the present invention only transmits reverse signals with the presence of a carrier signal, in other words this is known as "burst-mode" transmission. There is no teaching as to this type of behavior in the cited art. Specifically, the teachings at the time are directed towards the transmitters transmitting signals at all times regardless of the presence of a carrier signal. Transmitting signals with the presence of a carrier is advantageous to a cable environment because there is no longer a requirement for a one-to-one correlation between a transmitter and receiver. More specifically, there may be several transmitters that are combined and received by one receiver. Furthermore, the ingress or noise that is introduced with transmitted signals is greatly diminished in the system.

Reconsideration and reexamination of the present application is requested in view of the foregoing amendment and in view of the following remarks.

CONCLUSION

The foregoing is submitted as a full and complete response to the Office Action dated June 14, 2005. Claims 1-7, 10-21, and 24-31 will be pending in the present application upon entry of the present amendment, with claims 1, 17, and 29 being independent. Based on the amendments and remarks set forth herein, Applicant respectfully submits that the subject patent application is in condition for allowance. Because the claims may include additional elements that are not taught or suggested by the cited art, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

Upon entry of the foregoing Response, the above-identified patent application includes 3 independent claims. Because Applicant has previously paid for 31 total claims and 3 independent claims, Applicant submits that no additional fee is due. Should it be determined that any additional fee is due or any excess fee has been received, the Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to deposit account #19-0761.

Should the Examiner have any comments or suggestions that would place the subject patent application in better condition for allowance, he is respectfully requested to telephone the undersigned agent at the below-listed number.

Respectfully submitted:

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on August 3, 2005.


Faye Ropski